(19) World Intellectual Property Organization International Bureau

MIPO OMP



(43) International Publication Date 27 January 2005 (27.01.2005)

PCT

(10) International Publication Number WO 2005/006943 A3

- (51) International Patent Classification7: A61B 3/10, 3/14
- (21) International Application Number:

PCT/US2004/021269

- (22) International Filing Date: 2 July 2004 (02.07.2004)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/484,330

3 July 2003 (03.07.2003) US

- (71) Applicant (for all designated States except US): MED-IBELL MEDICAL VISION TECHNOLOGIES, LTD. [IL/IL]; M.T.M., 31905 Haifa (IL).
- (71) Applicant (for SD only): MCINNIS, Patricia [US/US]; 2325 42nd Street, N.W., Apt. 203, Washington, DC 20007 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): GIL, Tamir [IL/IL]; Kibbutz Givat Haim Meuchad, 38930 Kibbutz Givat Haim Meuchad (IL). WIGDERSON, Oded [IL/IL]; Wingate Street, 18/5, 33533 Haifa (IL). SASSON, Amit [IL/IL]; Hanadiv Street, 57, 46485 Herzelia (IL). LAOR, Dan [IL/IL]; Sireni St., 6, ISRAEL Haifa (IL).
- (74) Agents: BROWDY AND NEIMARK, P.L.L.C. et al.; 624 Ninth Street N.W. ||Suite 300, Washington, DC 20001-5303 (US).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report:
 18 August 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: AN ILLUMINATION METHOD AND SYSTEM FOR OBTAINING COLOR IMAGES BY TRANSCLERAL OPH-THALMIC ILLUMINATION

(57) Abstract: An illumination system for fundus imaging apparatus employing transcleral illumination of the interior of the eye. Color images of the interior of the eye are obtained by illuminating the sclera successively with red, yellow and green light. Those images are then treated as red, green and blue images by a post processing unit, which combines them to give a color image. This is useful for observing or imaging the interior of the eye, the retina, or the choroid. The observation or the imaging of the interior of the eye, the retina, or the choroid by applying the disclosed illumination method can be performed in conjunction with any system that includes optics for that purpose.

